

# Conservator Hack for July 21, 2019

## By Jane Dalley, CSP Conservator

### Yes, but is it acid-free?

I recently received an email from a local plastics supplier who wanted to let everyone in the Manitoba museum field know that his poly foam was acid-free. I was unable to help him because sadly, there is no such thing as acid-free foam. The level of acidity of an organic substance such as paper or an aqueous solution is measured using the pH (potential of Hydrogen) scale. Since it is impossible to create an aqueous solution from a plastic, it is not possible to take a pH reading and therefore impossible to determine whether a plastic is acidic or not.

There are other factors to take into consideration with plastics used for museums (including foams) such as type and presence of the plasticizers and additives. The cheaper plastic sheets use PVC as a plasticizer and it will off-gas or leach out, which is why the top page always stuck to your binder by the end of the year in high school. A closed-cell polyethylene, such as Ethafoam, is recommended for use with museum collections because it does not contain PVC and will not stick to artifacts.

When you are purchasing a plastic storage box you can check to see if the letters PP or PE are present. These letters stand for Polypropylene and Polyethylene, both stable polymers. However, rolls of unknown plastic rarely have identifying information to let you know their composition. The one plastic that is often easy to recognize is the kind used in dry cleaning bags. Given time, the ink from the name and contact information on the bag can transfer onto an artifact that it is in contact with and you will end up with a cleaning company's logo all over a christening dress!

If you are using plastic sheeting to cover shelves or artifacts, use good quality polyethylene and don't tape it down around the artifact/shelf or seal an artifact up within poly unless you are about to put it in a freezer. Otherwise, you may end up creating a humid micro-climate and your artifact will be as mouldy as the bag of spinach in your fridge.

Questions? Comments? Contact Jane Dalley at [conservator@museumsManitoba.com](mailto:conservator@museumsManitoba.com)

Reminder!!! **The person who comes up with the most creative use of pool noodles will win a box of Morden's Russian Mints.** Send a picture and brief description to [conservator@museumsmanitoba.com](mailto:conservator@museumsmanitoba.com). The winner will be announced at the 2019 AMM conference.